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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

166

7590

08/21/2009

EXAMINER

BARAN, MARY C

ART UNIT PAPER NUMBER

YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314

2857 DATE MAILED: 08/21/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,480	06/22/2005	Peter Axelberg	1511-1040	3318

TITLE OF INVENTION: MEASURING METHOD FOR DECIDING DIRECTION TO A FLICKERING SOURCE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	11/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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YOUNG & TH 209 Madison Str Suite 500				I here State addre	eby certify that this s Postal Service w essed to the Mail	s Fee( ith suf Stop	s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the day	deposit t class n above,	ed with the United nail in an envelope or being facsimile ated below.
ALEXANDRIA	, VA 22314								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONF	IRMATION NO.
10/539,480	06/22/2005	•	Peter Axelberg				1511-1040		3318
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	oue I	PREV. PAID ISSUE	REE	TOTAL FEE(S) DUE	1	DATE DUE
nonprovisional	YES	\$755	\$300		\$0		\$1055		11/23/2009
EXAM		ART UNIT	CLASS-SUBCLASS	CLASS		Ψ1035		11/23/2007	
BARAN,		2857	702-057000						
Change of corresponde FR 1.363).  Change of corresp Address form PTO/SI  "Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.	2. For printing on t (1) the names of u or agents OR, alter (2) the name of a s registered attorney 2 registered patent	ing on the patent front page, list nes of up to 3 registered patent attorneys PR, alternatively, ne of a single firm (having as a member a attorney or agent) and the names of up to d patent attorneys or agents. If no name is ame will be printed.							
PLEASE NOTE: Unl recordation as set fort (A) NAME OF ASSIG	less an assignee is identi h in 37 CFR 3.11. Comp GNEE	A TO BE PRINTED ON The fied below, no assignee detion of this form is NOTO	data will appear on the Tasubstitute for filing (B) RESIDENCE: (C)	he pa g an a CITY	tent. If an assigne ssignment. and STATE OR C	OUNT	TRY)		_
lease check the appropr	iate assignee category or	categories (will not be pr	rinted on the patent):	L	Individual 🖵 Co	rporati	on or other private gro	up entity	y Government
a. The following fee(s):  Issue Fee  Publication Fee (N Advance Order - a	ermitted)	<ul> <li>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</li> <li>A check is enclosed.</li> <li>Payment by credit card. Form PTO-2038 is attached.</li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul>							
_ ` .	<b>tus</b> (from status indicated is SMALL ENTITY statu		☐ b. Applicant is no	long	er claiming SMAI	LEN	ΓΙΤΥ status. See 37 CF	R 1 270	g)(2)
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10/539,480	06/22/2005	Peter Axelberg	1511-1040	3318		
466 75	466 7590 08/21/2009			INER		
YOUNG & THO	MPSON	BARAN, MARY C				
209 Madison Street			ART UNIT	PAPER NUMBER		
Suite 500 ALEXANDRIA, V	7A 22214		2857			
ALEXANDRIA, V	A 22314		DATE MAILED: 08/21/2009			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 142 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 142 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)		
	10/539,480	AXELBERG ET AL.		
Notice of Allowability	Examiner	Art Unit		
	MARY C BARAN	2957		
	MARY C. BARAN	2857		
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication is supplication is supplication in the communication in the communication is supplication.	n this application. If not included unication will be mailed in due course. <b>THIS</b>		
1. $\boxtimes$ This communication is responsive to <u>the amendments filed</u>	<u>d 16 June 2009</u> .			
2. The allowed claim(s) is/are 1,2,4-9 and 11-17.				
3. ☑ Acknowledgment is made of a claim for foreign priority under a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have		or (f).		
2. Certified copies of the priority documents have		on No		
3. Copies of the certified copies of the priority do	cuments have been receive	d in this national stage application from the	<b>:</b>	
International Bureau (PCT Rule 17.2(a)).		•		
* Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements		
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give				
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.			
(a) including changes required by the Notice of Draftspers	son's Patent Drawing Review	v ( PTO-948) attached		
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date				
<ul><li>(b) ☐ including changes required by the attached Examiner'</li><li>Paper No./Mail Date</li></ul>	s Amendment / Comment o	in the Office action of		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t				
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT				
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 🗆 Notice of In	formal Patant Application		
<ol> <li>Induce of References Cited (PTO-092)</li> <li>Induce of Professional Professio</li></ol>		formal Patent Application ummary (PTO-413),		
· · · · · · · · · · · · · · · · · · ·	Paper No.	Mail Date		
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. ∐ Examiner's	Amendment/Comment		
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material		Statement of Reasons for Allowance		
	9. 🗌 Other			
/Jeffrey R. West/				
Primary Examiner, Art Unit 2857				

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### **DETAILED ACTION**

# Response to Amendment

- 1. This action is responsive to the Amendments filed 16 June 2009. Claims 1, 2, 4-9 and 11-17 are pending. Claims 1, 7, 12 and 13 are amended. Claims 3 and 10 are cancelled.
- 2. The amendments filed 16 June 2009 are sufficient to overcome the previous objections to the claims.

# Allowable Subject Matter

- 3. Claims 1, 2, 4-9 and 11-17 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

Claims 1, 2, 4-6, 8, 9 and 14-17 are allowable over the prior art because the combination of limitations which recite a method for determining the direction of a flickering source in relation to a measurement point in an electrical network, the method comprising the steps of: with a signal processor apparatus, demodulating the recorded current signal and extracting, from the demodulated current signal, only the low-frequency current amplitude variations, the extracted low-frequency current amplitude variations representing a flicker component for the current signal; with another signal processor apparatus, demodulating the recorded voltage signal and extracting, from the demodulated voltage signal, only the low-frequency voltage amplitude variations, the

extracted low-frequency voltage amplitude variations representing a flicker component for the voltage signal; with a multiplier apparatus, creating a product by multiplication of the flicker component for the current signal and the flicker component for the voltage signal; with a processor apparatus, creating one of an average value of the instantaneous power signal and a summation of the partial powers, wherein a flicker power is obtained with a sign value that indicates the direction the flickering source is located in relation to the measurement point is not found, taught or suggested in the prior art of record.

Claim 7 is allowable over the prior art because the combination of limitations which recite a method of diagnosing at a measurement point in an electrical network, the method comprising the steps of: with a multiplier apparatus, creating a power vector by multiplying, for each frequency, a corresponding one of the N complex voltages of the voltage vector with a corresponding one of the N complex currents of the current vector; with a processor apparatus, eliminating the power component originating from the network frequency from the power vector by multiplying the power vector by a weighting vector so that the power vector, after the multiplication, comprises partial powers concerning power components from the flickering source; with the processor apparatus, creating a flicker power with a sign value by summation of the partial powers is not found, taught or suggested in the prior art of record.

Claim 11 is allowable over the prior art of record because the combination of limitations which recite an arrangement for deciding the direction to a flickering source in relation to a measurement point in an electricity network, the arrangement

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comprising: a first signal processor for demodulating the current signal and extracting from the demodulated current signal, only the low-frequency current amplitude variations that represent a flicker component for the current signal; a second signal processor for demodulating the voltage signal and extracting, from the demodulated voltage signal, only the low-frequency voltage amplitude variations that represent a flicker component for the voltage signal; a multiplier for creating a product by multiplication of the flicker component for current and the flicker component for voltage; and a processor for processing the product to create one of an average value of the instantaneous power signal and a summation of the partial powers, wherein a flicker power is obtained with a sign value that indicates the direction the flickering source is located in relation to the measurement point is not found, taught or suggested in the prior art of record.

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Claim 12 is allowable over the prior art because an arrangement for diagnostics at a measurement point in an electrical network, the arrangement comprising: a multiplier for the creation of a power vector by the multiplication, at each frequency, of a corresponding one of the N complex voltages of the voltage vector with a corresponding one of the N complex currents of the current vector; a first processor for the multiplication of the power vector by a weighting vector to eliminate the power component originating from the network frequency so that the power vector, after the multiplication, comprises partial powers concerning power components from the flickering source; and a second processor for the creation of a flicker power with a sign

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value, by summation of the partial powers is not found, taught or suggested in the prior art of record.

Claim 13 is allowable over the prior art because the combination of limitations which recite a method for determining the direction of a flickering source in relation to a measurement point in an electrical network, the method comprising the steps of: with a signal processor apparatus, demodulating the recorded current signal and extracting, from the demodulated current signal, only the low-frequency current amplitude variations, the extracted low-frequency current amplitude variations representing a flicker component for the current signal; with another signal processor apparatus, demodulating the recorded voltage signal and extracting, from the demodulated voltage signal, only the low-frequency voltage amplitude variations, the extracted low-frequency voltage amplitude variations representing a flicker component for the voltage signal; with a multiplier apparatus, creating a product by multiplication of the flicker component for the current signal and the flicker component for the voltage signal; with a processor apparatus, creating one of an average value of the instantaneous power signal and a summation of the partial powers wherein a flicker power is obtained with a sign value that indicates the direction the flickering source is located in relation to the measurement point is not found, taught or suggested in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARY C. BARAN whose telephone number is (571)272-2211. The examiner can normally be reached on Monday to Friday 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mary Catherine Baran/ 10 August 2009

/Jeffrey R. West/ Primary Examiner, Art Unit 2857